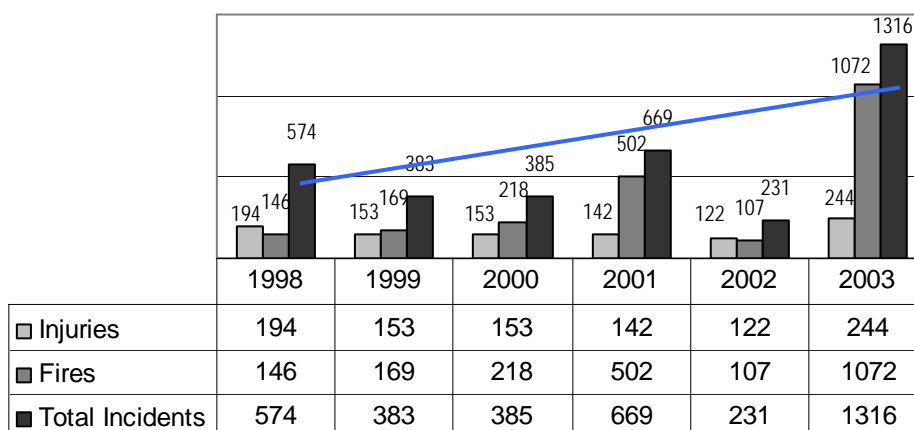


In an effort to prevent fires and injuries in Washington State, fireworks sales and discharge are restricted to June 28 through July 5, and some federally legal fireworks are banned. Despite this effort to prevent fires and injuries associated with the use of fireworks, there were 1,316 fireworks related incidents reported to the State Fire Marshal in 2003 by fire departments and hospital emergency rooms. Of the 1,316 reports, there were 1,072 fires, and 244 injuries. These incidents resulted in over \$2 million in property loss.

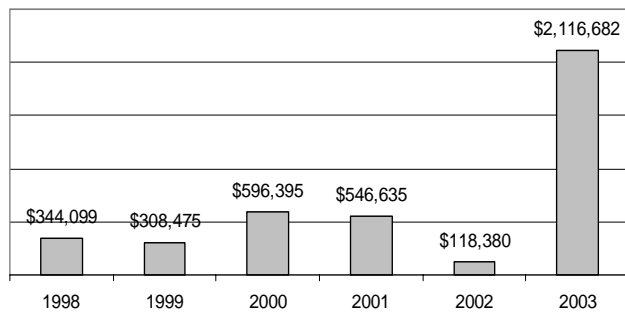
Six Year Incident Trend



Noteworthy Incidents for 2003 include:

- 14 fireworks-related fires at schools, including one that caused \$62,500 in damages.
- A \$1 m. dollar apartment fire that is being investigated as an arson started by fireworks, reported to be a roman candle.
- A \$250k. loss wildland fire that burned down a barn and contents started by juveniles with a ground spinner.
- 8 structure fires totaling over \$20,000 loss.
- 1 homicide under investigation in which roman candles were involved.
- 1 impaled object in the abdomen from an illegal explosive device consisting of a roman candle and a pipe.
- 5 amputation incidents of hands and fingers, all involving illegal explosive devices, M-80, M-100, a tennis ball and home made devices.

Reported Fireworks Dollar Loss from Fire



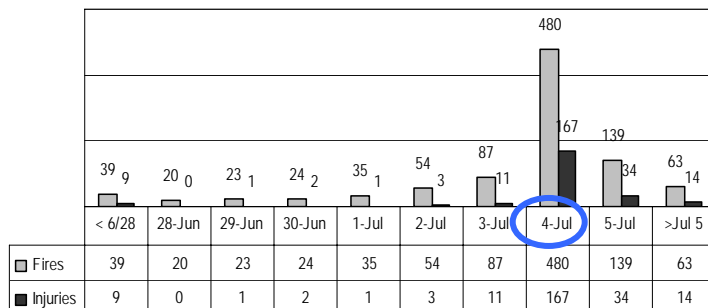
These firework related fires caused an estimated loss of \$2,116,682. Based on the reports received, illegal fireworks were identified as the cause in 33% of all reported firework related fires and caused \$49,680 property loss, or 2% of the estimated total loss from fireworks caused fires. Legal fireworks were identified in 23% of the reported fires, with a loss of \$1,375,630. In the remaining 44% of the fires, the type of fireworks was not identified by the reporting fire department (Table #1).

Type of Fire Table #1	Dollar Loss by Classification of Fireworks Device				Number of Fires by Classification of Device			
	Legal	Illegal	Unidentified	Total	Legal	Illegal	Unidentified	Total
Vegetation/Wildland	\$48,350	\$14,331	\$30,440	\$93,120	176	235	450	861
Residential	\$1,030,450	\$32,625	\$496,526	\$1,560,601	19	29	42	90
Commercial	\$252,750	\$2,550	\$140,380	\$395,680	13	7	12	32
Vehicle	\$30,080	\$100	\$23,000	\$53,180	5	12	25	42
Other/Unknown	\$14,000	\$100	\$0	\$14,100	8	18	225	251
Totals	\$1,375,630	\$50,70	\$690,346	\$2,116,682	221	301	754	1,276

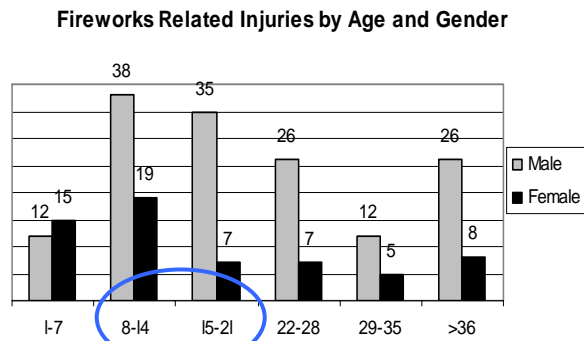
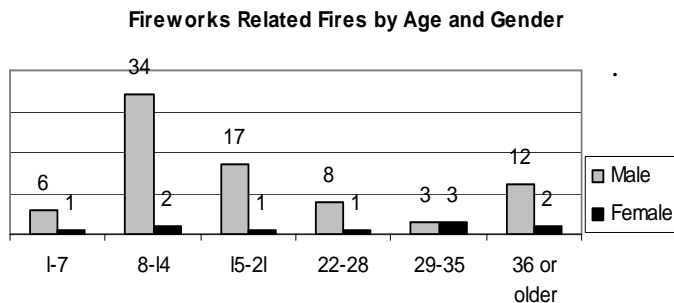
Wildland areas are at great risk from fires caused by fireworks. Of the fire incidents reported, 67% resulted in wildland fires, with a fire loss of \$93,120; 7% were residential with a fire loss of \$1,560,601 and 3% were vehicle fires with a fire loss of \$53,180 (Table #1).

Fireworks Related Incidents by Date

Fires and injuries by date clearly indicate that firework related incidents most often occur on the date that they are most widely used, July 4. This has remained constant over the past five years.



Fireworks related fires by age and gender clearly shows that male juveniles are causing most of the fireworks related fires. Fireworks related injuries by age and gender show that male youth and young adults are most often injured in fireworks related injury incidents. There was no adult supervision in 25% of these incidents. According to the Center for Disease Control, children are 11 times more likely to be injured by fireworks if they are unsupervised.



The type of injury caused most often was burns at 62%. The next leading injury was trauma at 30%, followed by amputations at 2%.

<i>Legal Classification of Firework</i>									
<i>Table #2</i>									
<i>Type of Injury</i>					<i>Injury Location</i>				
<i>Type of Injury</i>	<i>Legal</i>	<i>Illegal</i>	<i>Unk</i>	<i>Total</i>	<i>Body Part</i>	<i>Legal</i>	<i>Illegal</i>	<i>Unk</i>	<i>Total</i>
Burn 1 st Degree	30	17	16	63	Head	29	50	26	105
Burn 2 nd Degree	26	23	15	64	Hand	23	31	12	66
Burn 3 rd Degree	7	10	6	23	Arm	4	8	1	13
Trauma	13	50	11	74	Leg	15	14	5	34
Amputation	0	5	0	5	Torso	6	4	6	16
Unknown	1	4	10	15	Unknown	0	2	8	10
110	77	109	58	244	Totals	77	109	58	244

Note: Some Incident Reports account for more than one type of injury for the same incident.

Table #3 shows the type of fireworks devices that were involved in injury incidents. Illegal fireworks were the cause of 108 incidents or 44% while legal fireworks were responsible for 73 incidents or 30%. Of the 73 incidents involving legal devices, roman candles caused 19, or 25% of the incidents followed by multi aerals at 17, or 23% and third is sparklers at 13, or 18% of the incidents. The remaining miscellaneous fireworks caused 24 or 33% of the incidents.

<i>Table #3</i>			
<i>Injury by Type of Device</i>			
Legal	# of Incidents	Illegal	# of Incidents
Roman Candle	19	Bottlerocket	30
Multi Aerial	17	Homemade Explosive Device	19
Sparkler	13	Firecracker	15
Novelties	7	M80	12
Ground Bloom Flower	6	Missiles/Rocket	12
Cone Fountain	6	Public Display Mortars	10
Helicopter	2	Tennis Ball	3
Smoke bomb	2	Altered Fireworks	3
Wheel	1	M-100's or larger	3
Total Legal Devices	73	Cherry Bomb	1
		Total Illegal Devices	108
		Unknown Device Type	62
		Total - All Devices	243

<i>Table #4</i>	
<i>Cause of Injury</i>	
Holding	44
Throwing	28
Altered/Tampering	14
Leaning	13
Delayed Ignition	13
Surface	3
Other/unknown	128
Total	243

As shown in Table #4, the leading cause of fireworks related injuries is “holding” followed closely by throwing and then “altered/tampering.”

The safest way to prevent fireworks related injuries is to leave fireworks displays to trained professionals.¹ Their shows are spectacular but safe. There are over 100 professional displays on July 4 in Washington State, and other Independence Day activities.

Fireworks Incident Reports Received by County							
County	Fire Depts Reporting	Reports Received	Hospitals Reporting	Reports Received	Total Injury Incidents	Total Fire Incidents	Total Reports Received
Adams	1	1	0	0	0	1	1
Asotin	0	0	1	2	2	0	2
Benton	1	1	2	2	2	1	3
Chelan	2	11	1	1	1	11	12
Clallam	2	16	2	10	10	16	26
Clark	5	38	1	11	12	37	49
Cowlitz*	4	32	0	0	1	30	32
Douglas*	1	1	0	0	0	0	1
Ferry	0	0	1	2	2	0	2
Franklin	2	5	0	0	0	5	5
Grant***	9	46	0	0	0	43	46
Grays Harbor	5	18	1	9	14	13	27
Island	2	9	5	12	13	8	21
Jefferson	4	4	0	0	0	4	4
King*	26	287	7	47	57	287	345
Kittitas	2	7	0	0	0	7	7
Kitsap	5	84	2	2	8	78	86
Klickitat	1	3	0	0	0	3	3
Lewis	4	16	1	1	2	15	17
Lincoln	5	7	0	0	0	7	7
Mason	5	21	2	2	2	21	23
Okanogan**	5	8	1	1	1	6	9
Pacific*	4	7	2	4	5	5	11
Pierce**	15	184	8	32	41	173	216
Pond Oreille*	1	1	0	0	0	0	1
San Juan	3	9	0	0	0	9	9
Skagit*	5	17	3	9	9	16	26
Skamania	0	0	1	1	1	0	1
Snohomish**	15	112	4	26	31	105	138
Spokane*	6	24	2	2	5	20	22
Stevens	2	2	1	1	1	2	3
Thurston	7	53	1	2	3	52	55
Wahkiakum	1	1	0	0	0	1	1
Walla Walla	3	24	0	0	0	24	24
Whatcom	5	14	1	13	13	14	27
Whitman	1	5	2	7	7	5	12
Yakima	4	71	0	0	1	70	71
Totals	164	1143	52	199	244	1082	1342

* Total includes one Dept. reporting "No Incidents"

**Total includes two Depts. reporting "No Incidents"

***Total includes three Depts. reporting "No Incidents"

Note: Figures in this Table may be higher because it contains false alarms, non-injury incidents and departments reporting no incidents.

¹ National Fire Protection Association, Fireworks are Too Risky, NFPA Position Paper, On Line at <http://www.nfpa.org/Research/NFPAFactSheets/Fireworks/Risky/risky.asp>; printed 11/24/2003